

549,807

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
30 September 2004 (30.09.2004)

PCT

(10) International Publication Number  
WO 2004/083633 A1

(51) International Patent Classification<sup>7</sup>: F03D 11/04, 1/00

CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/EP2003/002888

(22) International Filing Date: 19 March 2003 (19.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): VESTAS WIND SYSTEMS A/S [DK/DK]; Smed Sørensens Vej 5, DK-6950 Ringkøbing (DK).

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventor; and

(75) Inventor/Applicant (for US only): JENSEN, Søren, P. [DK/DK]; Svinget 8, DK-6800 Varde (DK).

(74) Agent: BUDDE, SCHOU & OSTENFELD A/S; Vester Søgade 10, DK-1601 København V (DK).

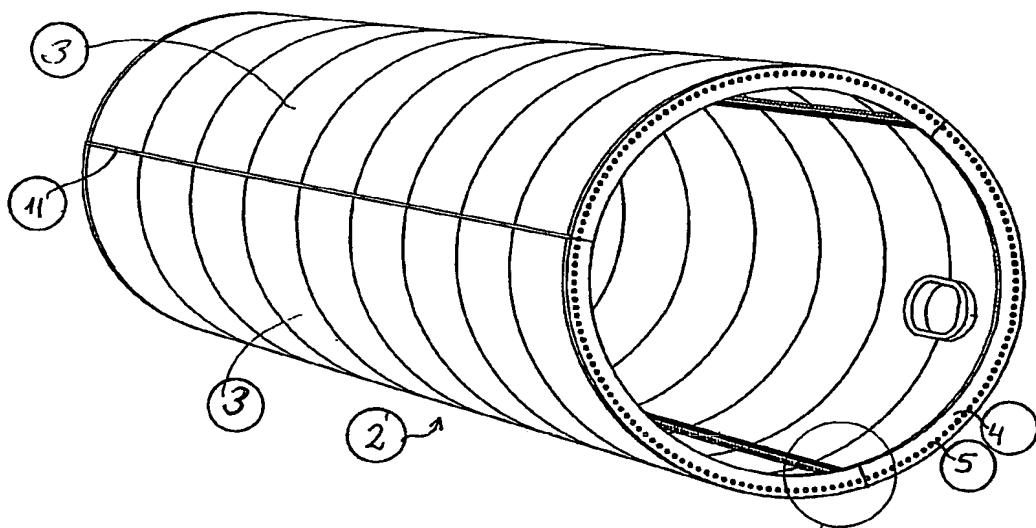
(81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF CONSTRUCTING LARGE TOWERS FOR WIND TURBINES



WO 2004/083633 A1

(57) Abstract: In order to transport large size windmill towers, the invention suggests a steel tower (1) for a windmill, comprising a number of cylindrical or tapered tower sections (2), at least the wider sections (2) of which being subdivided into two or more elongated shell segments (3), which combine into a complete tower section (2) by means of vertical flanges (6) tightened together, e.g., by bolts (10), said shells being also provided with upper and lower horizontal flanges (4), respectively, to allow interconnection of tower sections (2) one on top of the other.